

Alekseev, V. M.
ON ONE PROBLEM WITH A SMALL PARAMETER.
[1962] [19] p. 6 refs.
Order from OTS or SLA \$1.60 63-10728

Trans. of Moscow U. Vestnik. [Seriya 1: Matematika,
Mekhanika] (USSR) 1962 [v. 17] no. 4, p. 17-27.

DESCRIPTORS: *N-body problem, *Celestial mechanics,
*Differential equations, Functions, Inequalities,
Mathematical analysis.

A system of ordinary differential equations is con-
sidered. Its solutions tend to discontinuous functions
if the small parameter approaches zero. This result
is applied to the problem of three bodies in celestial
mechanics. (Author)

(Astronomy--Astrophysics, TT, v. 10, no. 4)

63-10728

I. Alekseev, V. M.

Office of Technical Services

ON THE STATE OF AN IRRADIATED BODY, by
A. G. Zhuravlev.
RUSSIAN, per, Vestnik Moscow Univ., Mate-Mekh.,
No 4, 1962, pp 58-62.
CIA X-6225

Sci/Nuclear Sci
Apr 67
FOR OFFICIAL USE ONLY

322,542

TT-64-10801

I. Loshkarev, A. I.

Loshkarev, A. I.
USE OF A CONDUCTING GAS IN A MAGNETIC
FIELD IN HYPERVELOCITY GUNS (O Metanii Tela
Provodyaschhim Gazom v Magnitnom Pole). [1964]
[32p] (foreign text included) 5refs
Order from OTS, SLA, or ETC \$3.60 TT-64-10801

Trans. of Moscow U. Vestnik / Seriya I: Matematika
Mekhanika (USSR) 1962 [v. 17] no. 4, p. 75-84.

(Physics--Electronics, TT, v. 12, no. 3)

Office of Technical Services

in the field of flow theory theorems for work-
hardening of bodies, by R. A. Masin.
RUSSIAN, per, Vestnik Moscow Univ., Mate-Mekh.
Ser, No 5, 1962, pp 60-64.
CIA X-6214

Sci/Math

Apr 67

FOR OFFICIAL USE ONLY

322,540

RUSSIAN, per, Vest Moskov Univ, Ser I Mate i
Mekh, No 6, 1963.

*FTD-MT-64-336

Sci
Sep 64

Analysis of Creep in Orthotropic Fiberglass, by
M. A. Koltunov, V. N. Bezukhov, 11 pp.
RUSSIAN, par, Vest Moskov Univer, Seriya 1,
Mate Mekh, No 6, 1963, pp 64-70, 9693181
FTD-TT-64-372

AEC-UCEL-TR-1073(4) 9225422 12pp
CIR/FDD X-6223 F04D
Sci - M/M
Jul 64

263,747

On the Harnack Inequality for Solutions of
Elliptic Differential Equations of the Second
Order, by S. N. Kruzhkov, L. P. Kuptsov.
RUSSIAN, per, Vestnik Moscow Univer, Seriya
I, Matematika, Mekhanika, No 3, 1964,
pp 3-14. P100370667-V
FTD-MT-64-559

Sci-Math
Jan 68

548,758

On the Uniqueness of the Expansion in a Trigonometric Series for Methods of Summation, by
M. I. Livshits.

RUSSIAN, per, Vestnik Moscow Univ Seriya I,
Matematika, Mekhanika, No 3, pp 15-24.

FI00370667-V

FTD-MT-64-559

Sci-Math.

Jan 68

348,759

On a Uniqueness Theorem in the theory of hyperbolic Quasi-Linear Equations, by

N. N. Kuznetsov, Ch. Chi.

RUSSIAN, per, Vestnik Moscow Univ Seriya I, Matematika, Mekhanika, No 3, pp 25-30.

P100370667-V

FTD-MT-64-559

Sci-Math

ABOUT Direct Powers of Binary Algebras, by
O. A. Ivanova.
RUSSIAN, per, Vestnik Moscow Univ Seriya I,
Matematika, Mekhanika, No 3, 1964, pp 31-38.
P1903706670V
FTD-MT-64-559

Sci-Math
Jan 68

348,761

The Derivation of Models of Liquid Media and
Solid Bodies From The Kinetic Equations of the
Averaged Force Field, by M. R. Korotkina.

RUSSIAN, per, Vestnik Moscow Univ Seriya I,
Matematika, Mekhanika, No 3, 1964, pp 39-50.

P100370667-V

FTD-MT-64-559

Sci-Math
Jan 68

348,762

On the Stability of Flow of a Viscoplastic
Medium Between Planes with a Slot, by
G. P. Prikazchikov.
RUSSIAN, per, Vestnik Moscow Univ Seriya 1,
Matematika, Mekhanika, No 3, 1964, pp 51-55.
P100370667-V
FTD-MT-64-559

Sci-Math
Jan 68

348,763

On the Asymptotic Theory of Relaxation Oscillations in Systems with One Degree of Freedom.

II. Calculation of the Period of the Limit Cycle, by N. Kh. Rozov.

RUSSIAN, per, Vestnik Moscow Univer Seriya I, Matematika, Mekhanika, No 3, 1964, pp 56-65.

PI00370667-V

FTD-17T-64-559

Sci-Math
Jan 68

348,764

The Motion of a Slender Body in a Liquid of
Variable Depth, by V. A. Yeroshin.
RUSSIAN, per, Vestnik Moscow Univ Seriya I,
Matematika, Mekhanika, No 3, 1964, pp 66-69.
PI00370667-V
FTD-MT-64-559

Sci-Math
Jan 68

348,765

About a Case of Stability of Transient Motion
of a Top on a Plane, by V. M. Morozov.

RUSSIAN, per, Vestnik Moscow Univ Seriya I,
Matematika, Mekhanika, No 3, 1964, pp 70-74.

P100370667-V

FTD-MT-64-559

Sci-Math

Jan 68

348,766

S-686/64

Control System With Redundant Active Elements in
the Case of Day Friction, by I. T. Borisenok.

SF-3235

RUSSIAN, per, Vest Moskov Univ, Seriya I, Mat
i Mekh, No 3, 1964, pp 75-86.

2
*JPRS 28072

Sci-Engr
July 64

Letter to the Editor, by E. G. Vol'pert.
RUSSIAN, per, Vestnik Moscow Univ Seriya I,
Matematika, Mekhanika, No 3, 1964, pp 87-89.

PI00370667-V

FTD-MT-64-559

Sci-Misc
Jan 68

348,767

Scientific Life. The Second All-Union Congress
on Theoretical and Applied Mechanics, by
S. V. Kalinin.

RUSSIAN, per, Vestnik Moscow Univ Seriya I,
Matematika, Mekhanika, No 3, 1964, pp 90-91.

PT00370667-V

FTD-MT-64-559

Sci-Mech
Jan 68

348,768

Sergey Pavlovich Finikov, by A. M. Vasil'yev,
G. F. Laptev.

RUSSIAN, per, Vestnik Moscow Univ Seriya I,
Matematika, Mekhanika, No 3, 1964, pp 92-96.

PI00570667-V

FTD-MT-64-559

USSR

Biog

Jan 68

348,769

The Interaction of a Body and a Semi-Infinite Obstacle
at Very High Velocities of Impact, by A. Ya. Sagomonyan,
RUSSIAN, per, Vest Moskov Univ, Seriya I Mate i
Mekh, No 5, 1964, pp 39-48.
NASA TT F-9603

Sci-ES & Astron
Feb 65
U.S. GOVERNMENT ONLY

274,916

RJ-5689

ARS

CATALYTIC CLEAVAGE OF ISOMERIC XYLENES WITH THE
PARTICIPATION OF WATER VAPOR, A. A. Balandin et al.,
Vestnik Moskov. Univ., Ser. Mat., Makh., Astron.,
Fiz. i Khim. 12. No. 1, 101-10 (1957).

4100 W; 5 T; 4 F; 4 R

\$17.95 (\$3.15)

Experimental Investigation of the Initial Stage
of Stream Formation, by A. I. Starshinov, 8 pp.
RUSSIAN, per, Universitet. Vestnik. Seriya
Matematiki, Mekhaniki i Astronomii, No 13, 1964.
P100371767-V
FTD-MT-65-02

Sci/Mech, Indus, Civil & Mar Engr
Feb 68
349,368

Radiant Gas Flow Near the Stagnation Point of a
Blunt-Nosed Body, by G. A. Kolton, 8 pp.
RUSSIAN, per, Universitet. Vestnik, Seriya
Matematiki, Mekhaniki i Astronomii, No 13, 1964.
P100371787-V
FTD-MT-65-02

Sci/Mech, Indus, Civil & Mar Engr
Feb 68
349,367

A Point Source in a Semi-Infinite Medium Bounded
by a Reflective Surface, by A. K. Kolesov & D. I.
Nagirner, 10 pp.

RUSSIAN, per, Universitet. Vestnik. Seriya
Matematiki, Mekhaniki i Astronomii, No 13, 1964.

P100371767-V

FTD-MT-65-02

Sci/Astron & Astrophys
Feb 68

349,370

The Question about Sources of Opacity of Atmospheres of Stars of Late Spectral Classes, by V. G. Baslavskiy, 14 pp.

RUSSIAN, per, Universitet. Vestnik. Seriya Matematiki, Mekhaniki i Astronomii, No 13, 1964.

P100371767-V

FTD-MT-65-02

Sci/Astron & Astrophys
Feb 68

379,369

Application of Methods of Analytic Dynamics in
the Theory of Optimal Transfers, by V. S.
Novoselov, 20 pp.
RUSSIAN, per, Universitet, Vestnik, Seriya
Matematiki, Mekhaniki i Astronomii, No 13, 1964.
P100371767-V
FTD-HT-65-02

Sci/Astron & Astrophys
Feb 68

349,371

P100371767-V
FTD-MT-65-02

Sci/Math Sci
Feb 68

349,372

Flagtensar Algebra, by R. I. Pimenov, 6 pp.
RUSSIAN, per, Universitet, Vestnik, Seriya
Matematiki, Mekhaniki i Astronomii, No 13, 1964.
P100371767-V
FTD-HT-65-02

Sci/Math Sci
Feb 68

349,373

On Absence of a Positive Discrete Spectrum for
the Laplacian Operator of the Dirichlet Problem
in Certain Unbounded Regions, by A. G. Ramm,
6 pp.

RUSSIAN, per. Universitet. Vestnik, Seriya
Matematiki, Mekhaniki i Astronomii, No 13, 1964.

P100371767-V

FTD-MT-65-02

Sci/Math Sci
Feb 68

349,374

One Simple Method of Establishing Independence
of Statistics, by T. S. Faygel'son, 4 pp.
RUSSIAN, per, Universitet. Vestnik, Seriya
Matematiki, Mekhaniki i Astronomii, No 13, 1964.
P100371767-V
FTD-MT-65-02

Sci/Math Sci
Feb 68

349,375

Nonstationary Melting of Bodies Under the Action
of Aerodynamic Heating, by S. I. Matveev, 6 pp.
RUSSIAN, per, Universitet. Vestnik, Seriya
Matematiki, Mekhaniki i Astronomii, No 13, 1964.
P100371767-V
FTD-IT-65-02

Sci/Phys
Feb 68

349,376

Rotational Motion of a Sphere in a Rare Flow of
High Speed, by Han Tun Po, 8 pp.

RUSSIAN, per. Universitet. Vestnik. Seriya
Matematiki. Mekhaniki i Astronomii, No 13, 1964.

PI00371767-V

PTD-MT-65-02

Sci/Phys
Feb 68

349,377

Norms of Linear Polynomial Operators in Connection
with Problems of Approximation of Continuous
Functions, by N. A. Sapogov, 18 pp.

RUSSIAN, per, Universitat. Vestnik. Seriya
Matematiki, Mekhaniki i Astronomii, No 13, 1964.

P100371767-V

FTD-MI-65-02

Sci/Math Sci
Feb 68

349,363

An approximate Method of Solution of Dirichlet Problem, and Estimates of the Rate of Convergence of Solution of Difference Equations to Solutions of Elliptic Equations with Discontinuous Coefficients, by V. Ya. Rivkind, 18 pp.

RUSSIAN, per, Universitat. Vestnik. Seriya Matematiki, Mekhaniki i Astronomii, No 13, 1964.

F100371767-V

FTD-MT-65-02

Sci/Math Sci
Feb 68

349,362

Asymptotic Distribution of Third Order Integral
Matrices, by Yu. V. Linnik & B. F. Sknbenko,
14 pp.
RUSSIAN, per. Universitet. Vestnik. Seriya
Matematiki, Mekhaniki i Astronomii, No 13, 1964.
P100371767-V
FTD-MT-65-02

Sci/Math Sci
Jan 68

349,361

Mathematics, Mechanics & Astronautics NO 29, 1968

P100371767-7
FTD-MT-65-02

Sci/Phys
Jan 68

349,360

Strict Estimate of Error of Integration of
Differential Equations by the Störmer Method,
by L. Ya. Adrianova, 16 pp.
RUSSIAN, per, Universitet. Vestnik. Seriya
Matematiki, Mekhaniki i Astronomii, No 13, 1964.
P100371767-V
FTD-MT-65-02

Sci/Phys
Jan 68

349,359

Certain Theorems About Probability Search in a
Determined Field, by P. B. Kharlamov, 10 pp.
RUSSIAN, per, Universitet. Vestnik. Seriya
Matematiki, Mekhaniki i Astronomii, No 13, 1964.
P100371767-V
FTD-MT-65-02

Sci/Math Sci
Feb 68

349,364

Investigation of Change of Pressure Along Length
and Ends of the Kiffel Chamber of the Supersonic
Wind Tunnel, by B. A. Balanin, 6pp.
RUSSIAN, per, Universitet. Vestnik. Seriya
Matematiki, Mekhaniki i Astronomii, No 13, 1964.
P100571767-V
FTD-MT-65-02

Sci/Mech, Indus, Civil & Mar Engr
Feb 68 349,365

The Turbulent Boundary Layer on a Penetrable Flat
Plate, by I. P. Ginsburg & G. V. Kocheryshenkov,
18 pp.

RUSSIAN, per, Universitet. Vestnik. Seriya
Matematiki, Mekhaniki i Astronomii, No 13, 1964.

P100371767-V

FTD-MT-65-02

Sci/Mech, Indus, Civil & Mar Engr
Feb 68 349,366

Kinetics of the Isotopic Exchange of Boron Between
Boron Trifluoride and Its Anisole Complex, by G. M.
Panchenkov, et al.

RUSSIAN, per, Vest Mosk Univ, Ser II, Khim, Vol XV,
No 3, 1960, pp 7-10.

PAC-4826

Sci
Aug 61

9074452

The Explosiveness of Ozone-Oxygen Gasoline Mixture
in Metal Containers, by B.V. Strakhov and
V.P. Lebedev, ~~1950~~

RUSSIAN, from West Moscow, U.S.S.R. ~~1950~~
No. 1, 1950, pp 19, 20. *P* 9670280
NATL. MOL. 854/5

Sci - Chem
14 Mar 51

Some Thermodynamic Constants of Alkali Metaniobates and Metatantalates, by A. V. Lapitskiv. 5 pp.
RUSSIAN, per, Vestn. Mosk. Univ. Ser. 2, Khim.,
Vol 15, No 4, 1960, pp 25-27.
NASA TT-F-13421

July 71

THE TRANSFER OF AN EXPLOSION OF GASEOUS OZONE-
OXYGEN MIXTURE TO A LIQUID OZONE-OXYGEN
SOLUTION, BY B. V. STRAKHOV, V. P. LEBEDEV, ET AL,
3 PP.

RUSSIAN, PBR, VEST MOSK UNIV. SER II. KHIM,
NO 4, 1960, PP 31-32. 9665789

FTD-TT-62-337

SCI - CHEM
JUL 62

204,445

The Problem of the Absolute Potential Jump, by
B. B. Damakin.
RUSSIAN, per, Vestnik Moskovskogo Universiteta,
Seriya 2: Khimiya. Vol 3, Ser. 2, 1961,
pp 27-32. *no 2*
NLL RTS 2577

Sci - Chem
Oct 67

342,704

Solid State Transformations in Chromium and Its Alloys, by A. T. Grigor'yev, E. M. Sokolovskaya.

RUSSIAN, per, Vest Mosk Univ Ser Khim, Vol XVI, No 6, 1961, pp 3-15.

DSIR RTS2171

Sci - Mat & Met

Apr 63

NAL RTS 2171
229,317

Catalytic Decomposition of Liquid Ozone at
Low Temperatures, by G. I. Yemel'yanova,
V. P. Lebedev, N. I. Kobozov, 5 pp.

RUSSIAN, per, Vestnik Moskovskogo Univer.
Ser II Khim, No 6, 1961, pp 31-34. 9676339

FTD-MT-62-214

Sci - Chem

193, 986

4 May 62

62-34332

Agronomov, A. E. and Ling, Li-tang.
THE EFFECT OF THE STRUCTURE OF A SILICA
GEL SUPPORT ON THE ACTIVITY OF A COPPER
CATALYST. Apr 62, 6p. 13 refs.
Order from ICH in v. 2, no. 2, \$15.00/year

Trans. of Moscow U. Vestnik. [Seriya 2]: Khimiya
(USSR) 1961 [v. 16] no. 6 [p. 53-61].

DESCRIPTORS: *Chemical engineering, *Silicon
compounds, Dioxides, *Gels, *Copper catalysts,
Reaction kinetics, *Cyclohexanols, Dehydrogenation.

(Chemistry--Physical, TT, v. 8, no. 11)

I. Agronomov, A. E.
II. Ling, Li-tang
III. International Chemical
Engineering, New York

Office of Technical Services

Pyrolysis of Low Octane Gasoline Vapor to
Acetylene Olefins in a Hydrogen Plasma, by
D. Ilin and E. N. Brevin.
RUSSIAN, per, Moscow. Universitet. Vestnik.
Seriya 2. Khimiya, Vol 17, No 2, 1962,
pp 29-30.
NTC 71-14651-07D

Feb 72

63-12623

Busev, A. I., Fan, C., and Kuzyaeva, Z. P.
SODIUM p-(MERCAPTOACETAMIDO) BENZENESUL-
FONATE AS A REAGENT FOR MOLYBDENUM. [1962]

Sp.

Order from ATS \$7.00

ATS-11P66R

Trans. of Moscow U. Vestn[ik] Ser[iya] 2: Khim[iya].
[USSR] 1962; v. 17, no. 4, p. 43-47.

DESCRIPTORS: *Molybdenum, Reagents, *Sodium
compounds, Thiol radicals, Amides, Benzenes,
*Sulfonates.

- I. Busev, A. I.
- II. Fan, C.
- III. Kuzyaeva, Z. P.
- IV. ATS-11P66R
- V. Associated Technical
Services, Inc., East
Orange, N. J.

ATS RJ-4134

(Chemistry--Analytical, TT, v. 9, no. 7)

Office of Technical Services

Viscosity of Boron Trifluoride, by G. M. Panchenkov,
et al, 4 pp.

RUSSIAN, per, Vestnik Moscow Univer Seria II Khim,
Vol XVII, No 5, 1962, pp 11-~~XX~~ 13. 9215586

²
AEC-TR-6006

Sci - Mat & Met

Aug 63

A Study of the Uranium (IV)--Uranium (III)
System, by I. P. Alimarin.
RUSSIAN, per, Moscow Universitet. Vestnik.
Seriya 2, Khimiya, No 5, 1962, pp 50-54.
NTC-71-15437-07B

Feb 72

Quantitative Determination of Acrylonitrile
with Hexamethyleneimine, by A. P. terent'ev.

RUSSIAN, per, Vest Mosk Univ, SerII: Khim,
Vol XVII, No 5, 1962, pp 83-84.

ATS RJ-4071

Sci-Chem
Dec 63

244.881

Preparation of Boron Trifluoride, by G. M.
Panchenkov, A. V. Makarov, 5 Dp.

RUSSIAN, per, Vest Moskov Univ., Ser II, Khim, No 1,
1963, pp 3-6. 9269193

AEC-Tr-5732

Sci - Mat & Met

Jul. 63

Electrosynthesis of Ozone From Oxygen at High
Pressures, by I. A. Semiokhin, N. I. Kobozev, 9 pp.
RUSSIAN, per, Vest Moskov Univ, Seriya II, Khimiya,
No 3, 1963, pp 37-40. 9692324
FTD-TT-64-195

Sci - Chem
May64

257,647

On Enthalpies of Formation of Ion Compounds,
by A. F. Vorob'ev, S. M. Skuratov, 7 pp.
RUSSIAN, per, Vest Moskov Universit, Seriya Khim,
Vol XVIII, No 3, 1963, pp 45-47. 9226781
Z AEC-UCRL-Tr-1098(L)

Sci-Chem
Feb 65

273,221

Examples of Formation of Ions: OH^- , F^- , Na^+ ,
 Li^+ in Aqueous Solutions, by A. P. Vorob'ev,
A. S. Monyenkova, et al. 6 pp.
RUSSELAN, per. Vest Moskov Univ. Seriya II Khim.,
Vol. XVIII, No. 3, 1964, pp 48-51. 9235876
AEC-UCEL-TT-1099 (L)

Sch-Cheam
Jun 65

281,070

TT-64-16574

Trunov, V. K. and Kovba, L. M.
X-RAY ANALYSIS OF THORIUM TUNGSTATE AND
MOLYBDATE. [S]p 1ref
Order from OTS, SLA, or ETC \$1.10 TT-64-16574

I. Trunov, V. K.
II. Kovba, L. M.

Trans. of Mosc[ow] U. Vestnik / Seriya 2; Khim[i]-
ya (USSR) 1963, v. 18, no. 3, p. 60-63.

(Physics--Solid State, TT, v. 12, no. 4)

Office of Technical Services

Spectropolarimetric Study of Some Amides and
Xanthogenates in Connection with L. Chugaev's
Research, by V. Dem'Yanovich, V. Potapov.
RUSSIAN, per, Vestnik Moskovskogo Universiteta,
Seriya Khimicheskaya, Vol 18, No 4, 1963,
pp7-24
CSIRO/No 7599

Sci -
Jul 67

334,110

Spectrophotometric Investigation of
Reaction of Niobium and Tantalum With
Salicylhydroxamic Acid, by I. P. Alimarin,
N. P. Borzenkova, 10 pp.
RUSSIAN, per, Vest Mosk Univ, Ser II,
Khim, No 6, 1963, pp 65-69. 9698637
FTD-TT-65-920

Sci - Chem
Dec 65

291,923

The Relationship Between Diffusion and Near Order
in Liquids, by G.M.Panchenkov and V.V.Erchenkov.
RUSSIAN, per, Vestnik, Moscow Univ. (Seriya 2:
Khimiya), 1964, vol.19, no.1, pp.20-29.
ICE

Chem
Aug 66

307,765

Isotopic Exchange Between Carbon Dioxide and Its
Ethanolamine Solutions, by I. A. Semyokhin,
G. M. Panchenkov, et al, 5 pp.
RUSSIAN, per, Vest Moskov Univ, Ser II, Khim, Vol XIX,
No 1, 1964, pp 35-38.
AEC-ORNL-Tr-68

Sci-Chem
Sep 64

265,844

Influence of Alloying on the Hardness of NiAl and;
Its Solid Solutions, by L. A. Kucherenko, V. A. Troshkina,
5 pp.
RUSSIAN, per, Vest. Moscow Univ, Ser II Khimiya,
No 1, 1964, pp 53-55. 9695735
FTD-TT-64-1270

Sci - M/M
Jan 65

271,464

Synthesis of 5-Ethylpicolone Acid, by A.N. Kost,
6 pp.
VEST. MOSK UNIV SER KHIM, Vol 19, No 6, 1964,
pp 427-430.
GB/DEFDRIC-Tr-2951-72

Jan 73

Theory of Dynamic Creep, by A. A. Predvoditelev,
B. A. Smirnov,

RUSSIAN, per, Vest Mosk U (Fiz), Vol VIII, No 8,
1953, pp 79-86.

NACA 1330

Sci - Physics

31,025

Interference Light Filters for the Ultraviolet
Region of the Spectrum, by A. Yu. Klement'yeva,
6 pp.

RUSSIAN, per, Vest Mosk U, Ser III, File
Astron, No 1, 1960, pp 23-26. 9671763

FTD MIL-1204/1

Sci - Phys

171,548

20 Oct 61

(NY-4698)

The Effects of Fluctuations on a Two-Channel
Phase Meter With Frequency Multipliers, by
V. I. Medvedev, B. P. Loskutov, 28 pp.

RUSSIAN, per, Vest Moskov U, Series III, ^{Fig}Phys,
Astron, No 1, 1960, pp 27-38.

JPRS 7146

Sci - Electron

134,330

Dec 60

Concerning the Association of Processing of
Experimental Data in Investigating the Irregular
Ionosphere, by V. D. Gusev, T. A. Gaylit, 20 pp.

RUSSIAN, per, Vest. Moskov U. Ser. ^{1/2} III, Fiz. Astron.,
No 1, 1960, pp 39-49. F

JPRS 5987

Sci - Phys

Nov 60

131, 924

14

(DC-4343)

Formulas for Calculation of Perturbations in
Elliptical and Hyperbolic Motions, by A. A.
Orlov, 11 pp.

RUSSIAN, per, Vest Moskov Universiteta, Ser III,
Fiz, Astron, No 2, 1960, pp 51-58.

JPRS 6079

Sci - Space Research
Oct 60

129,718

On the Hall Effect in Ferromagnets, by X.
D. I. Volkov, 4 pp.

RUSSIAN, per, Vest Mosk Univ, Ser III, Fiz
Astron, No 4, 1960, pp 18-20.

MIF V-155
9093213

174, 024

Sci
Nov 61

Magneto-optic Properties of Iron-Nickel and Nickel-Copper Alloys in the Infrared Range, by G. S. Krinchik, R. D. Muralieva, 4 pp.

RUSSIAN, per, Vest Moscow U, Ser III, Fiz-Astron, No 4, 1960, pp 43-47.

NDP K-245
9092870

173,817

Sci

Determination of the Coefficients of Turbulent
Diffusion in the Sea With the Aid of Radioactive
Indicators, by B. A. Nelepo.
RUSSIAN, per, Vest Moskov Univ Ser III Fiz i
Astron, No 4, 1960, pp 641-70.
Navy Tr 3894/HO 217

Sci - Earth Sci & Astron
Sep 64

266,306

On a Paradox in the Theory of Thermal Fluctuations in
Nonlinear Resistances, by R. L. Stratonovich.

RUSSIAN, per, Vest Mos. Gos. Univ., Ser Fiz, Astron,
No 4, Jul-Aug 1960, pp 99-102.

International Digest Index
Electronics Express
Vol III, No 5

Sci

Mar 61.

143,860

(DC-5299)

Gamma-Spectrometric Measurements of the
Radioactivity of the Waters of the Atlantic
Ocean, by B. A. Nalepo, 10 pp.

See III Fig
RUSSIAN, per, Vest Moskov U, No 5, 1960,
pp 36-42.

JPRS 6838

Sci - Geophys

142, 453

Mar 61

(DC-5299)

Some Results of the Total Radioactivity of
Oceanic Waters in the Antarctic Sector of the
Pacific Ocean, by B. A. Nolepo, 6 pp.

RUSSIAN, per, Vest Moskov 10, No 5, 1960,
pp 43-46.

JPRS 6838

Sci - Geophysics

Mar 61

142,454

Gas Equilibrium Behind the Shock Wave in
Oxygen, Nitrogen and Their Mixtures With
Xenon, by S. A. Losev, 8 pp.

RUSSIAN, per, Vest Moskov Univer, Ser III,
Fiz. Astron. No 5, 1960, pp 47-52. 9671692

FTD MCL-1347/1

Sci - Phys

174, 761

29 Nov 61

Plasma Ellipsoid in Its Own Force Field, by A. Ya.
Voronov, 12 pp.

RUSSIAN, par, Vest Mosk U Fiz Astron, Series III,
No 5, 1960, pp 74-80. 9647395

FED-4T-61-67

Sci - Phys
Jan 69

219,983

Analysis of the Dependence on Depth of
Anomalies in Oceanic Areas, by
N. P. Grushinskiy.

RUSSIAN, per, Vestnik Moskovskogo
Universiteta. Sec. III. Fizika i
Astronomiya, No 5, 1960, pp 81-93.
ACIC TC 949

Sci/Earth Sci & Astron
Oct 65

290,293

(NY-6489)

Certain Problems in Magnetohydrodynamics Considering
the Finite Conductivity of the Medium, by I. I.
Nochevinka, 12 pp.

RUSSIAN, per, Vest Moskov U. Seriya III, Fizika,
Astronomiya, No 1, 1961,

JPRS 9579

Sci - Phys

Jul 61

160,398

62-33206

Osipov, D. I.

PRESERVATION OF THE MAXWELLIAN DISTRIBUTION FORM IN A RELAXING GAS (O Sohranenii Formy Maksvellovskogo Raspredeleniya v Relaksiruyushchem Gaze) tr. by Andre L. Brichant. 30 Oct 61 [6]p. 3 refs. NASA TT F-8173. Order from OTS or SLA \$1.10 62-33206

Trans. of Moscow U. Vestnik. [Seriya 3: Fizika, Astronomiya] (USSR) 1961 [v. 16] no. 1, p. 13-15.

DESCRIPTORS: *Gases, Electrons, *Relaxation time, Thermodynamics, Statistical functions, Differential equations, Fluid dynamics, Velocity.

The process of Maxwellian equilibrium settling in a light gas surrounded by an atmosphere of heavy gas is being investigated. It is assumed that the interaction forces are inversely proportional to the fifth power of the distance. It is shown that the initial light gas (Physics--Molecular, TT, v. 9, no. 7) (over)

I. Title: Maxwellian distribution

I. Osipov, D. I.

II. NASA-TT-F-8173

III. National Aeronautics and Space Administration, Washington, D. C.

Office of Technical Services

A Simple Method of Tuning a Molecular Generator,
by G. P. Igubinov, G. M. Strakhovskiy.

RUSSIAN, per, Vest Moskov Univ Seriya III
Fiz Astron, No 1, 1961, pp 79-81.

Navy Tr 3547/AFL 383

Sci - Phys
Sep 63

344,162

High-Frequency Oscillations in a Low-Pressure
Discharge, by I. A. Savchenko, A. A. Zaytsev,
9 pp.

RUSSIAN, per, Vestnik Moscovskogo Universiteta,
Seriya 3, Fizika, Astron, No 2, 1961,
pp 19-25. 9676301

FTD-TT-62-116

Sci - Phys

192, 674

Apr 62

Fursov, V. S.

DIPOLE INTERACTION AND SCATTERING OF LIGHT

tr. by Astrid Werner. Nov 62 [6]p. 5 refs.

Order from ARS in its Journal, v. 32, no. 11, \$3.00

Trans. of Moscow U. Vestnik. [Seriya 3: Fizika, Astronomiya] (USSR) 1961 [v. 16] no. 2, p. 60-72.

DESCRIPTORS: *Light, Scattering, Dipole moment, Gases, Molecules, Optics, Field theory, Quantum statistics, Corrections.

63-12216

1. Title: Rayleigh scattering

1. Fursov, V. S.

11. American Rocket Society,
New York

(Physics--Optics, TT, v. 9, no. 1)

Office of Technical Services

Radiation of Gravitational Waves by
"Elementary Particles," by K. P. Stanyukovich,
16 pp.

RUSSIAN, per, Vest Moskov Univer, Ser III,
Fiz i Astron, No 5, 1961, pp 71-82. 9664224

FTD-TI-61-394

Sci - Phys

186,245

2 Mar 62

The Theory of a Magnetogasdynamie Generator",
by M. I. Kiselev, 9 pp.

RUSSIAN, per, Vest Moskov U, Ser III, Fiz, Astron
No 1, 1962, pp 63-68. 9667374

FTD-TI-62-1181

Sci - Phys
Jan 63

219,952

63-11506

Generalov, N. A.
VIBRATIONAL RELAXATION IN OXYGEN AT HIGH
TEMPERATURES. I. tr. by B. P. Kuvshinov.
6 Sep 62, 13 p. 12 refs. APL JHU TG-230-T330.
Order from DTIC \$9.50 63-11506

Trans. of Moscow ~~Univ.~~ Seriya 3: Fizika,
Astronomiya (USSR) 1962 Vol. 17 no. 2, p. 51-59.

DESCRIPTORS: *Oxygen, Molecules, Vibration, Re-
laxation time, Shock waves, *Shock tubes.

The method of measuring the vibrational relaxation
time of oxygen molecules behind a shock front is
described. The vibrational excitation time τ for O_2
varies from 2.5 to 0.17 μ sec with change in temper-
ature from 2500 to 10,000°K. The dependence of $\log \tau$
on $T^{-1/3}$ agrees with the Landau-Teller theory.

(Author)

(Physics--Molecular, TT, v. 9, no. 3)

- I. Generalov, N. A.
- II. APL/JHU TG-230-T330
- III. Applied Physics Lab.,
Johns Hopkins U.,
Silver Spring, Md.
- IV. Contract N0w-62-0604-c

Handwritten: Mary Jo 344/APL 330

Office of Technical Services

Amplification and Noises of Parametric
Three-Frequency Converter With Summary
Output Frequency, by M. D. Karasov,
Kao Pao-Hsin, 11 pp.

RUSSIAN, per, Vest Mosk Universiteta,
Seriya III, Fiz, Astron, No 2, IX 1962,
pp 68-73. 9568571

FTD-MT-63-12

Sci-Phys
May 63

220,821

Distortion of Form of Ultrasonic Wave of
Finite Amplitude in Solids, by V. A.
Krasilnikov, A. A. Gedroyts, 5 pp.

RUSSIAN, per, Vest Mosk Universiteta,
Seriya III, Fiz, Astron, No 2, 1952,
pp 92, 93. 9668624

FTD-MT-63-13

Sci-Phys
May 63

230,852

Interaction of Particles in Nonlinear
Electrodynamics, by V. M. Linkin,
N. N. Kolesnikov, 15 pp.

RUSSIAN, per, Vest Mosk Universiteta,
RekSeriya III Fiz. Astron, No 3, 1962,
pp 17-26. 9668199

FTD-TT-62-1332

Sci-Phys
Apr 63

227,054

Series Solution of the Problem of Two Fixed Centers,
by R. K. Choudkhari, 9 pp.

RUSSIAN, per, Vest Moscow Univ, Ser III Fiz Astron,
No 4, 1962, pp 83-91.

CIA/PDD K-5276

STS-77-64-10838

Bd1 - Math & Data Proc

Dec 63

FOR OFFICIAL USE ONLY

243,580

On Polar Orbits of Artificial Earth Satellites, by
E. P. Aksenov, E. A. Grebenikov, 9 pp.
RUSSIAN, per, Vest Moscow Univ, Fiz-Astron, No 5,
1962, pp 81-90.
CIA/FDD X-5526

Sci - Earth Sci & Astron
Jan 65
FOR OFFICIAL USE ONLY

272,779

Nikitina, T. N.
INVESTIGATION OF THIN PERMALLOY FILMS IN
WEAK MAGNETIZING FIELDS. [1963] 7p. 4 refs.
Order from OTS or SLA \$1.10 63-14445

Trans. of Moscow U. Vestnik Seriya 3: Fizikal.
Astronomiya (USSR) 1962 [v. 17] no. 6, p. 59-62.

DESCRIPTORS: *Metal films, Iron alloys, Nickel
alloys, *Magnetism, *Magnetic fields, Magnetic
properties, Measurement, *Ferromagnetic materials,
Films, Magneto-optic effect.

In fields less than the coercive force, a change in film
magnetization is observed which occurs over very short
time intervals. The signal amplitude produced by these
processes is small. The change in magnetization
occurs due to small displacements in the range of
embryo areas of the new phase and are independent of
(Physics--Magnetism, TT, v. 10, no. 7) (over)

63-14445

I. Nikitina, T. N.

Office of Technical Services

Absorption of Solar Radiation by Aquatic Vapors
According to Observation at Various Altitudes,
by M. I. Kozhevnikov, Ye. A. Makareva, 6 pp.

RUSSIAN, per. Vest Mosk Univ, Ser Fiz, Astron,
No 6, 1962, pp 73-79.

ACSI I-2889
ID 2237318
519th MI Bn

Sci - Phys
Nov 63

240, 878

The Problem of the Numerical Calculation of the
Atmospheric Pressure Field with a Full System of
Hydrodynamic Equations, by V. M. Berezin.

RUSSIAN, per, Vestnik Moskovskogo Universiteta,
Seriya 3, Fizika, Astronomiya, No 6, 1962,

pp 82-83.

~~CIA-8-101~~

FTD Special 351-67

Sept 68

366,437

On The Problem of the Transverse Stability of
Charged Beams in Accumulating Systems, by V. G.
Grishin, 5 pp.

RUSSIAN, per, Vestnik Moskva Universitet, Seriya III,
Fizika, Astronomiye, No 6, 1962, pp 83-85. 96. 9371

*FTD-TT-63-530

Sci - Phys

May 63

BAND MODEL FOR INFRARED RADIATION ABSORPTION BY
WATER VAPOR, BY N. I. KOZHEVNIKOV, YE. A. MAKAROVA,
ET AL, 9 PP.

RUSSIAN, PER, VEST MOSKOVSKOGO UNIV, SER FIZ ASTRONOM-
IYA, NO 1, 1963, PP 54-61.

JPRS 21243
OTS 63-18165

SCI-EARTH SCI & ASTRON

PHYS

OCT 63

344,417